High Pass Filter

HFCN-2700+

CASE STYLE: FV1206

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site

Available Tape and Reel at no extra cost

20, 50, 100, 200, 500, 1000, 3000

Devices/Reel

for RoHS Compliance methodologies and qualifications

50Ω

2650 to 6500 MHz

Maximum Ratings

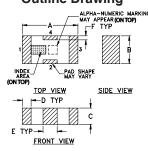
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	7W max. at 25°C

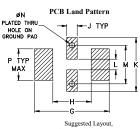
^{*} Passband rating, derate linearly to 3W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded.

Pin Connections

RF IN	1
RF OUT	3
GROUND	2,4

Outline Drawing

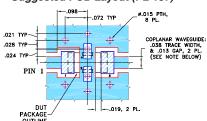




Outline Dimensions (inch)

	G	F	Е	D	С	В	Α
	.169	.009	.032	.020	.037	.063	.126
	4.29	0.23	0.81	0.51	0.94	1.60	3.20
wt	Р	N	M	L	K	J	Н
grams	.071	.012	.087	.024	.122	.024	.087
.020	1.80	0.30	2 21	0.61	3.10	0.61	2.21
	1.00	0.30	2.21	0.01	0.10	0.01	2.21

Demo Board MCL P/N: TB-270 Suggested PCB Layout (PL-137)



NOTES: 1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350B WITH THICKNESS .020" ± .0015".

COPPER: 1/2 OZ. EACH SIDE.
FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.

DENOTION SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)

DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

- low cost
- small size
- 7 sections
- temperature stable
- hermetically sealed
- LTCC construction
- excellent power handling, 7W

Applications

- sub-harmonic rejection
- transmitters/receivers

- lab use

Electrical Specifications(1,2) at 25°C

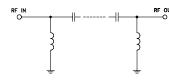
STOP (MI	Hz)	fco, MHz Nom.	PASSI (MF			R (:1) /p.	POWER INPUT (W)	NO. OF SECTIONS
IVII		(loss 3 dB)	(loss < 1.3 dB)	(loss < 2 dB)		Frequency (MHz)	(**)	
(loss > 40 dB)	(loss > 20 dB)	Тур.	Max.	Typ.	Stopband	1.5:1		
1500	1800	2500	3000-5700	2650-6500	20:1	2900-5500	7	7

(1) In Application where DC voltage is present at either input or output ports, coupling capacitors are required.

(2) Measured on Mini-Circuits Characterization Test Board TB-270.

typical frequency response

electrical schematic

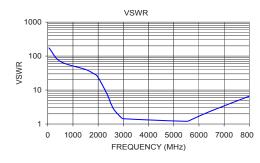


40dB
F co F 1.3dB FREQUENCY

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	
50.00	66.69	173.72	
500.00	69.03	69.49	
1500.00	48.61	40.41	
1800.00	29.62	31.03	
1980.00	20.93	24.83	
2350.00	7.06	7.70	
2500.00	3.85	4.11	
2650.00	2.11	2.53	
2900.00	1.04	1.59	
3000.00	0.9	1.43	
5500.00	0.75	1.20	
5700.00	0.89	1.35	
6500.00	1.85	2.45	
8100.00	5.71	7.05	





Notes
A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.

B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.

C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp